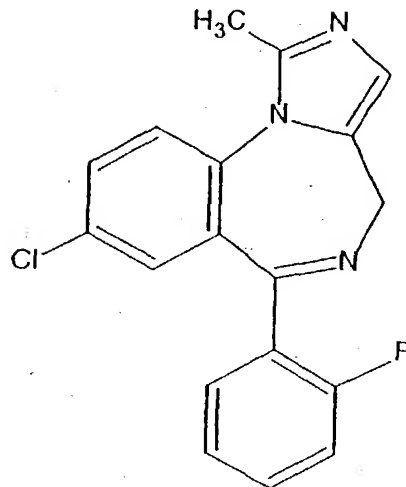
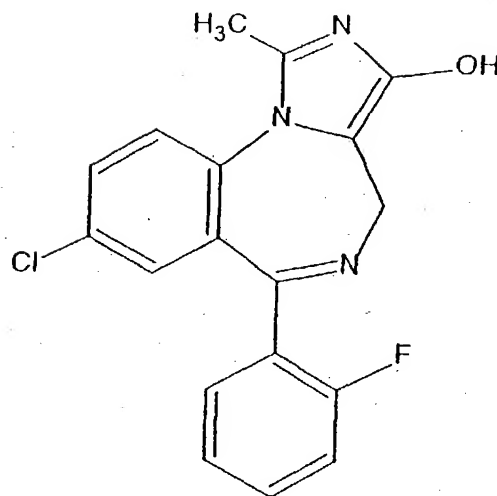


CYP3A4



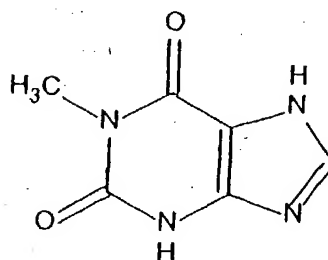
MDZ (Midazolam)



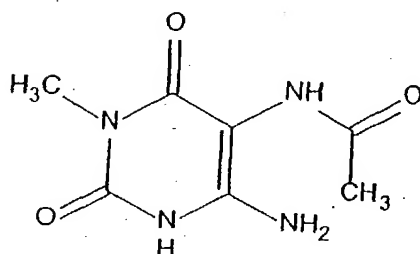
1-OH-MDZ (1-Hydroxymidazolam)

Fig. 1

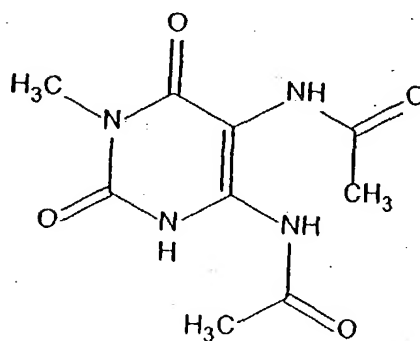
NAT2



1X (1-methylxanthine)



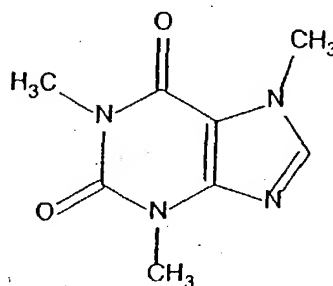
AAMU (5-acetamido-6-amino-methyluracil)



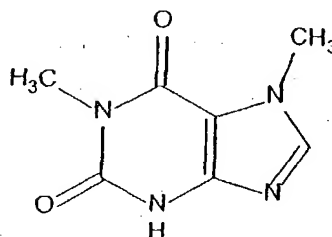
AFMU (5-acetamido-6-formylamino-methyluracil)

Fig. 2

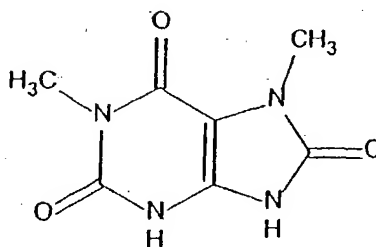
CYP1A2



Caffeine (1,3,7-trimethylxanthine)



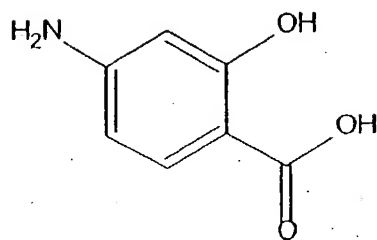
1,7-DMX (1,7-dimethylxanthine)



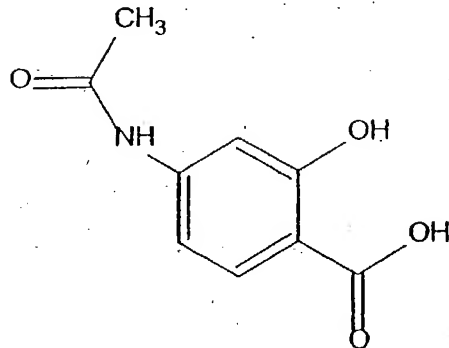
1,7-DMU (1,7-dimethyluracil)

Fig. 3

NAT1



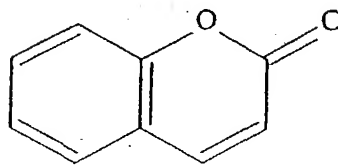
p-ASA (p-aminosalicylic acid)



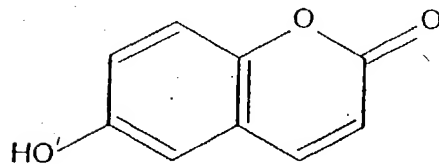
Acetyl-pASA (acetyl-p-aminosalicylic acid)

Fig. 4

CYP2A6



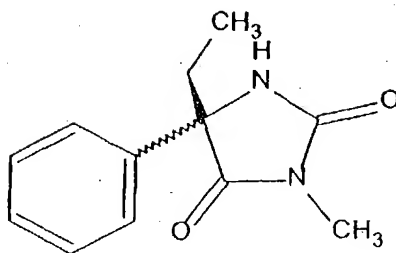
Coumarin



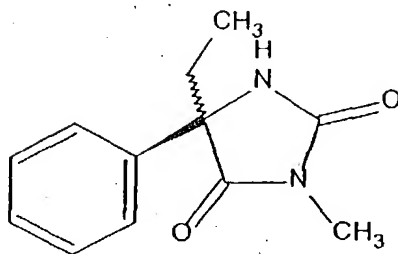
7-Hydroxycoumarin

Fig. 5

CYP2C19



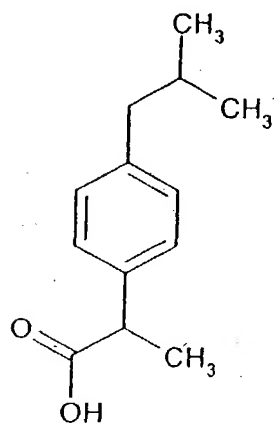
R-(-)-Mephénytoin



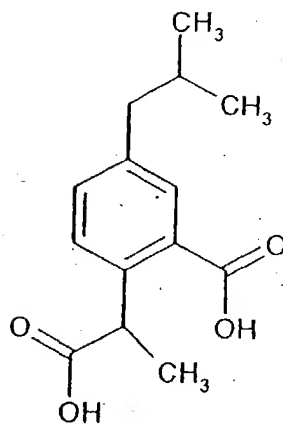
S-(+)-Mephénytoin

Fig. 6

CYP2C9



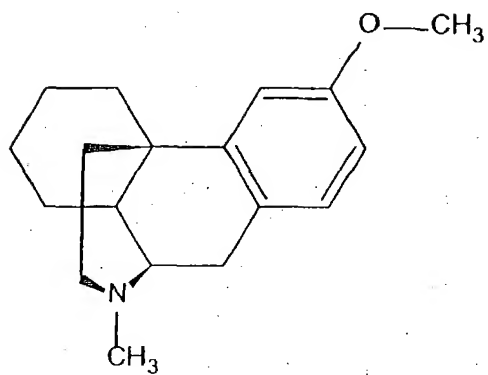
(s) -Ibuprofen



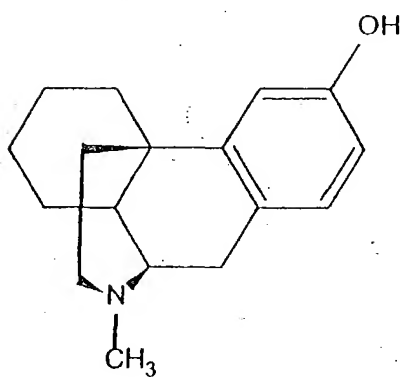
2-carboxyibuprofen

Fig. 7

CYP2D6



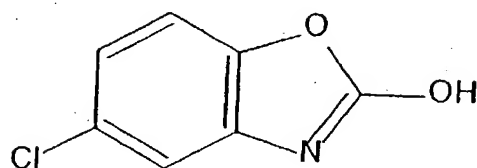
Dextromethorphan



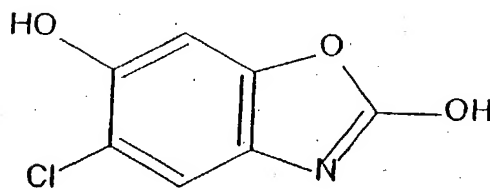
Dextroorphan

Fig. 8

CYP2E1



Clorzoxazone



6-Hydroxychlorzoazone

Fig. 9

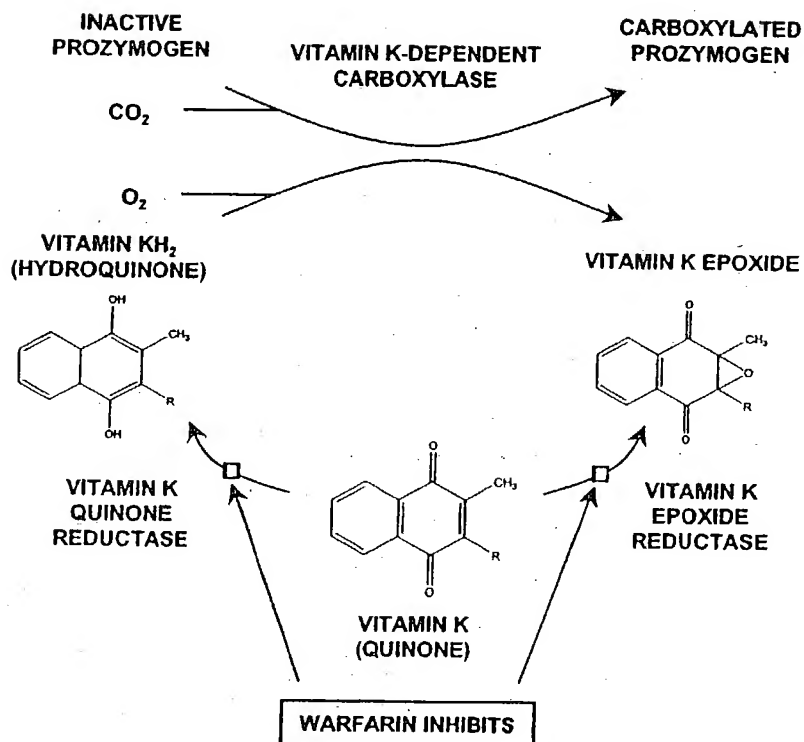


Fig. 10

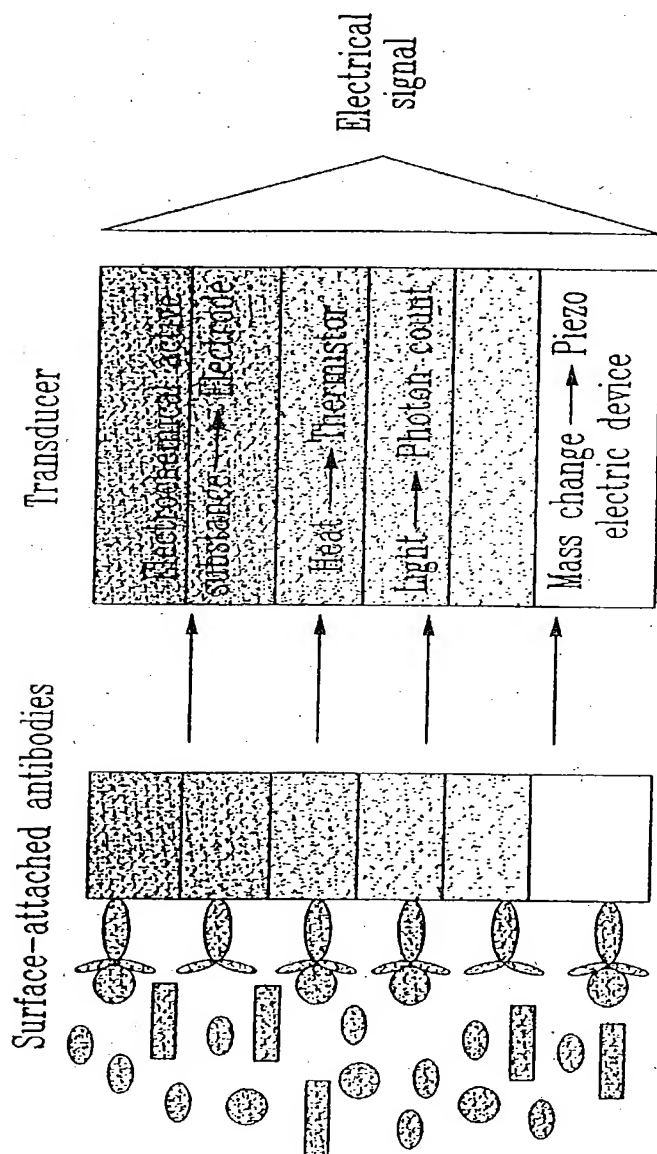


Fig. 11

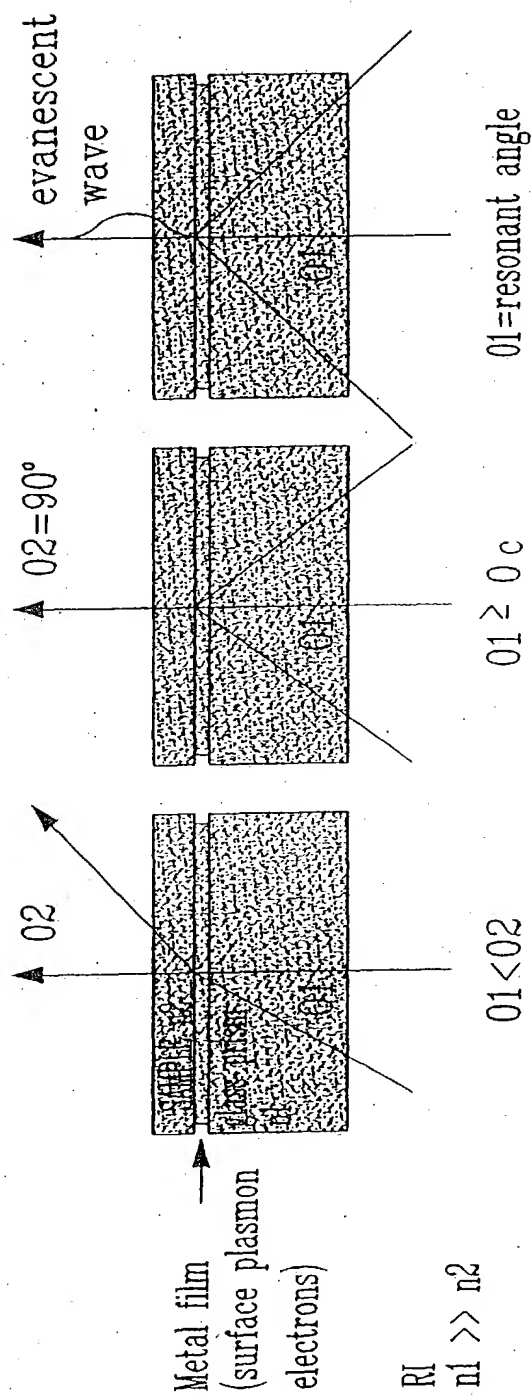


Fig. 12

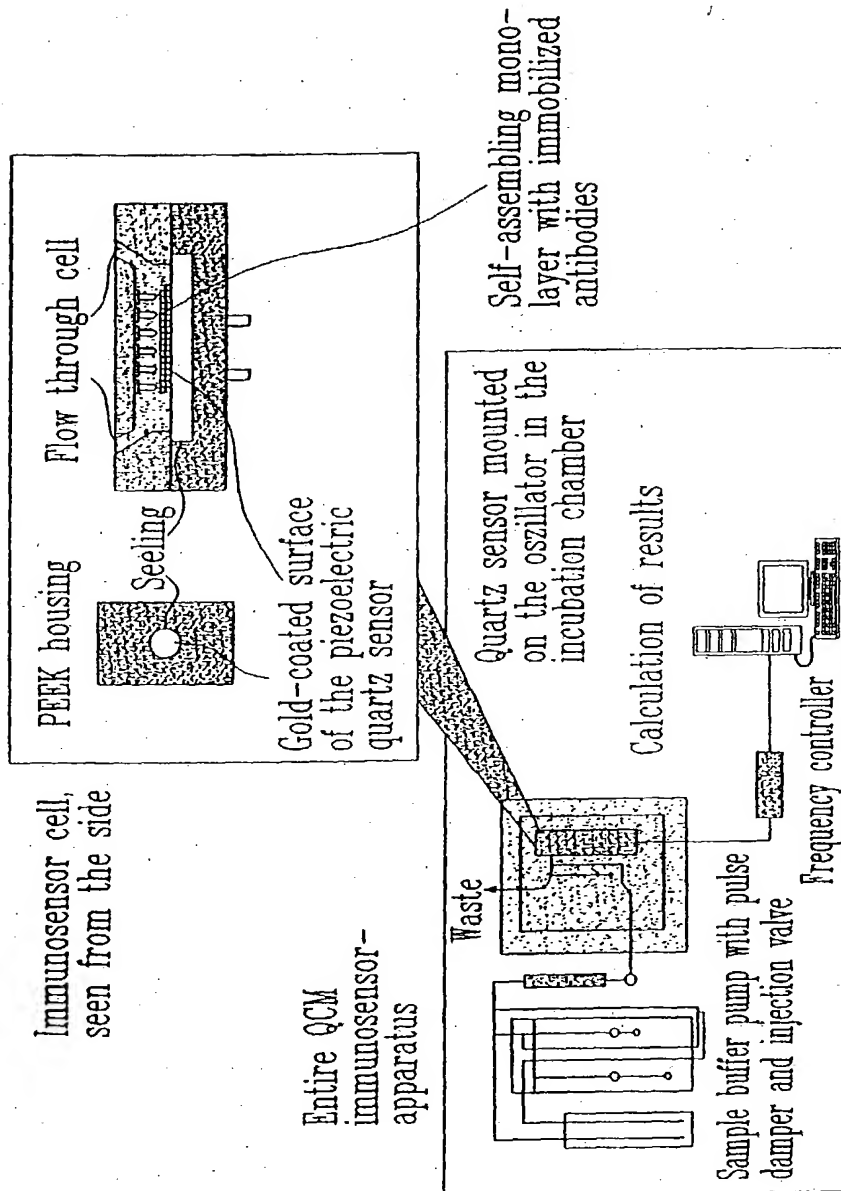
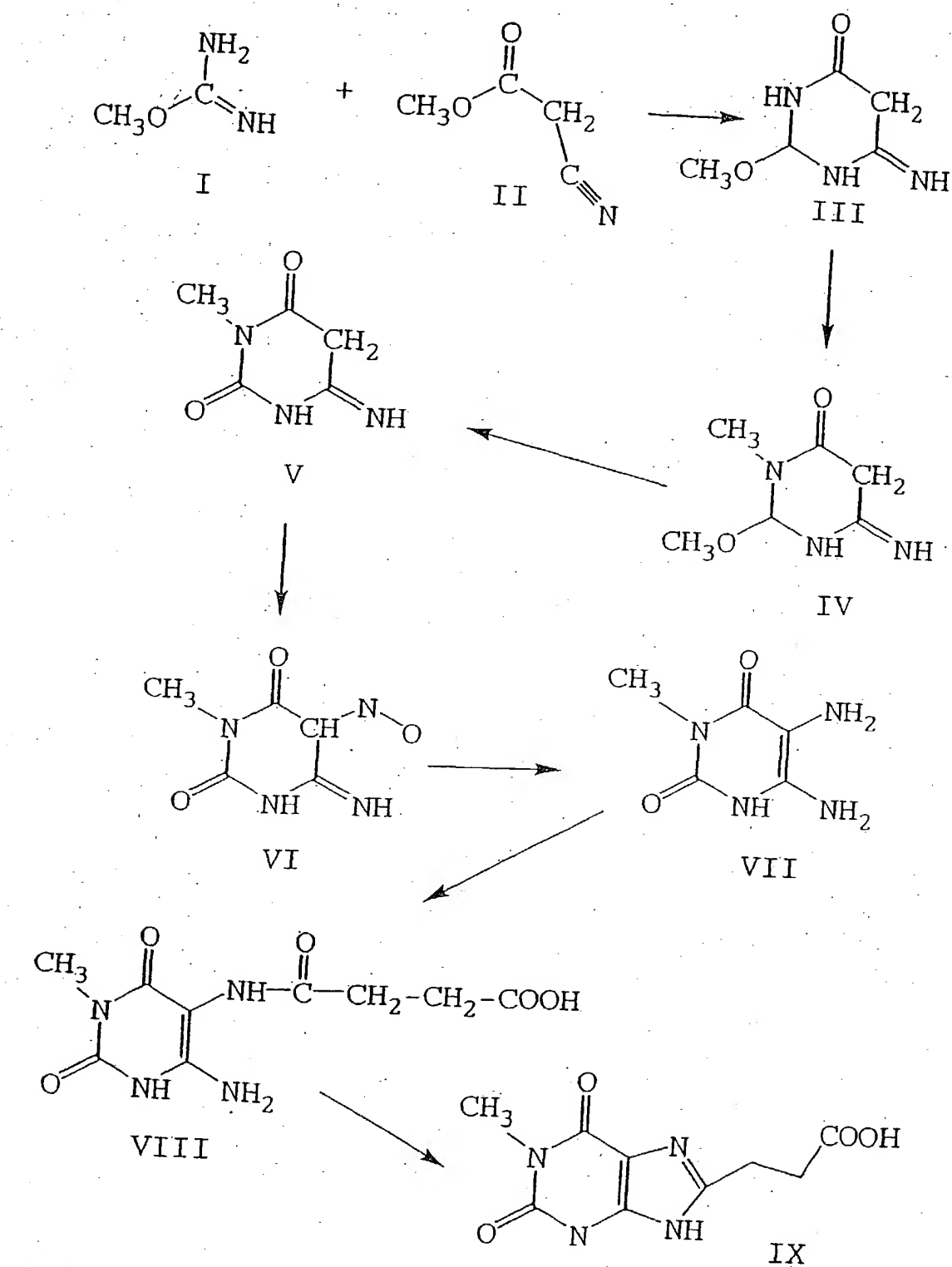


Fig. 13

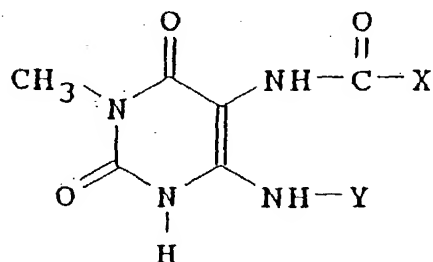


AAMU-hemisuccinic acid

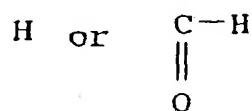
1 methyl xanthine-8-propionic acid

Fig. 14

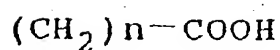
Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or
 AFMU (5-acetamino-6-formylamino-3-methyluracil)



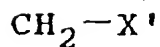
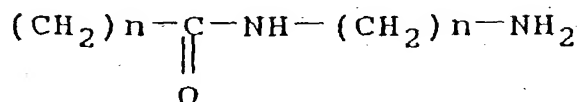
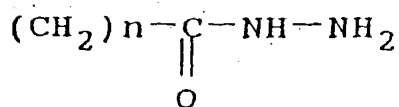
Where Y is



X



where n = 2, 3 or 4



where X' is I, Br, or Cl

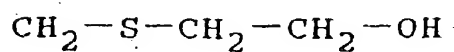
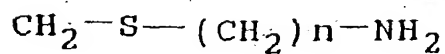
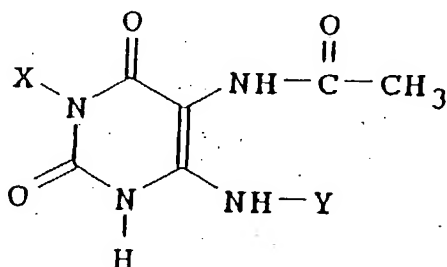
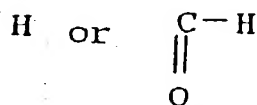


Fig. 15

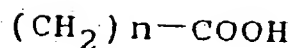
Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or
 AFMU (5-acetamino-6-formylamino-3-methyluracil)



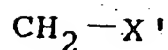
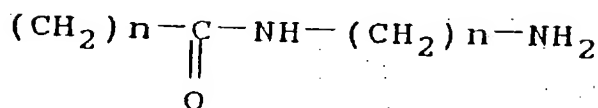
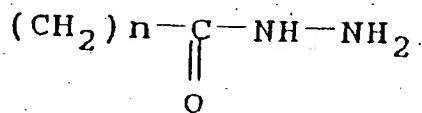
Where Y is



X



where n = 2, 3 or 4



where X' is I, Br, or Cl

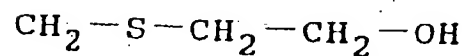
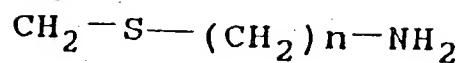
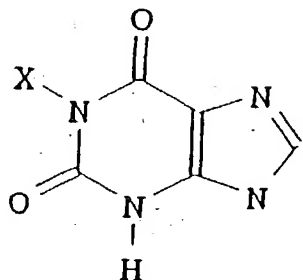
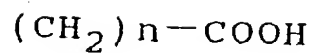


Fig. 16

Derivatives of 1X (methylxanthine)



X



where $n = 2, 3$ or 4

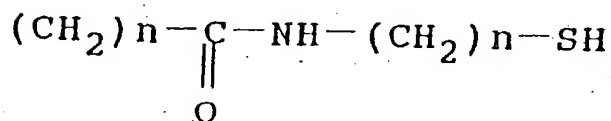
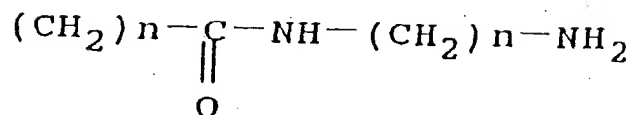
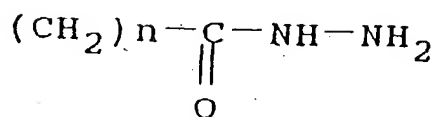
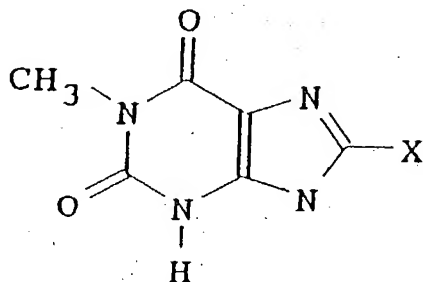
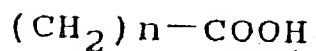


Fig. 17

Derivatives of 1X (methylxanthine)



X



where $n = 2, 3$ or 4

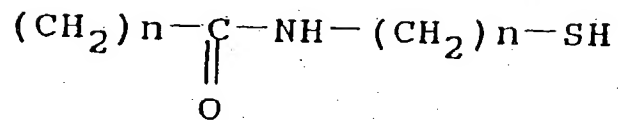
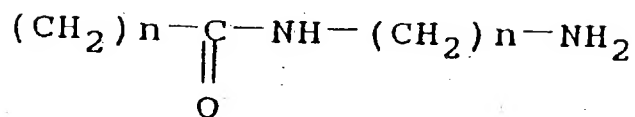
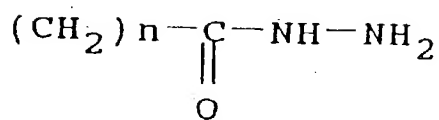


Fig. 18

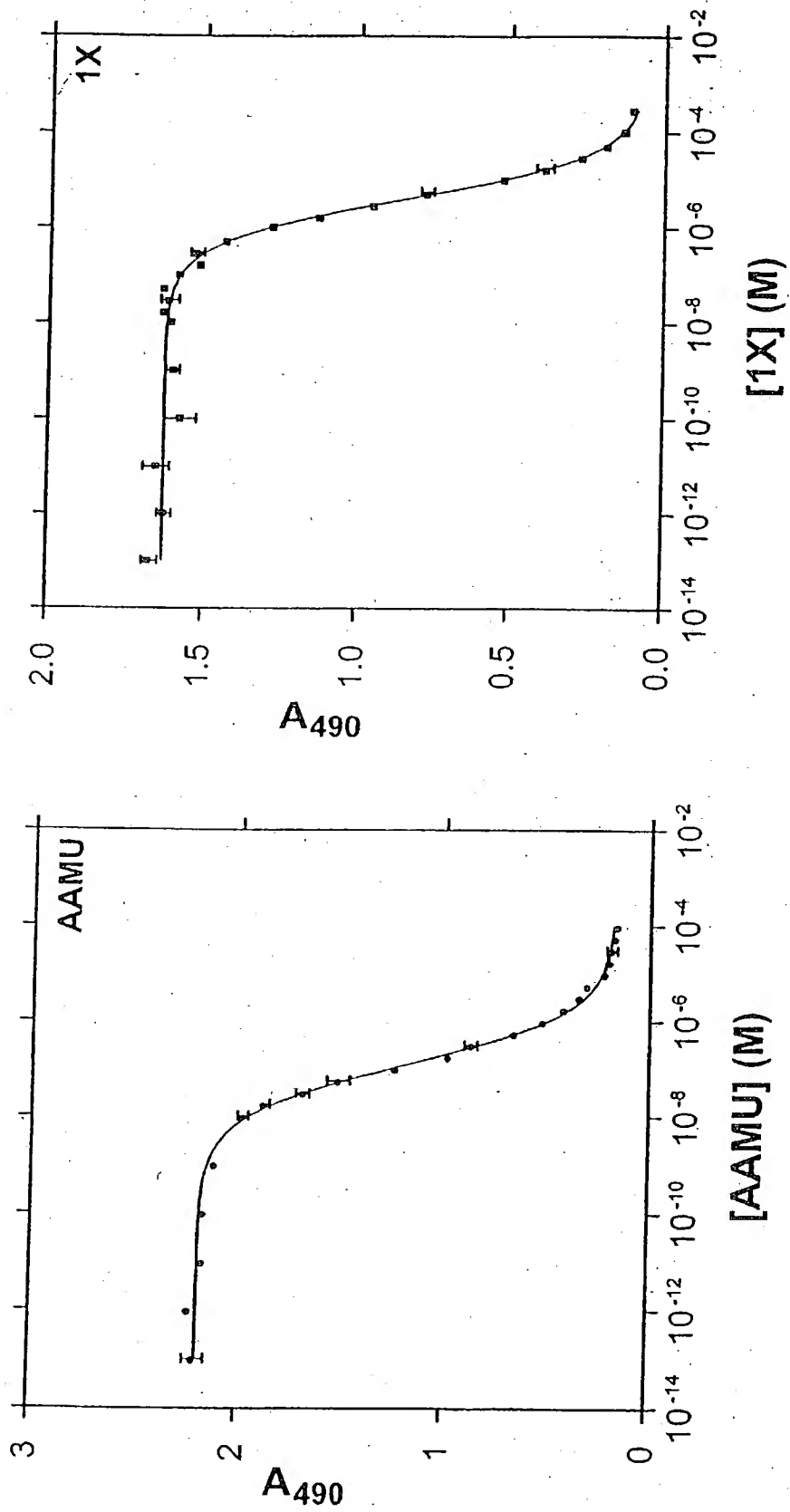


Fig. 19

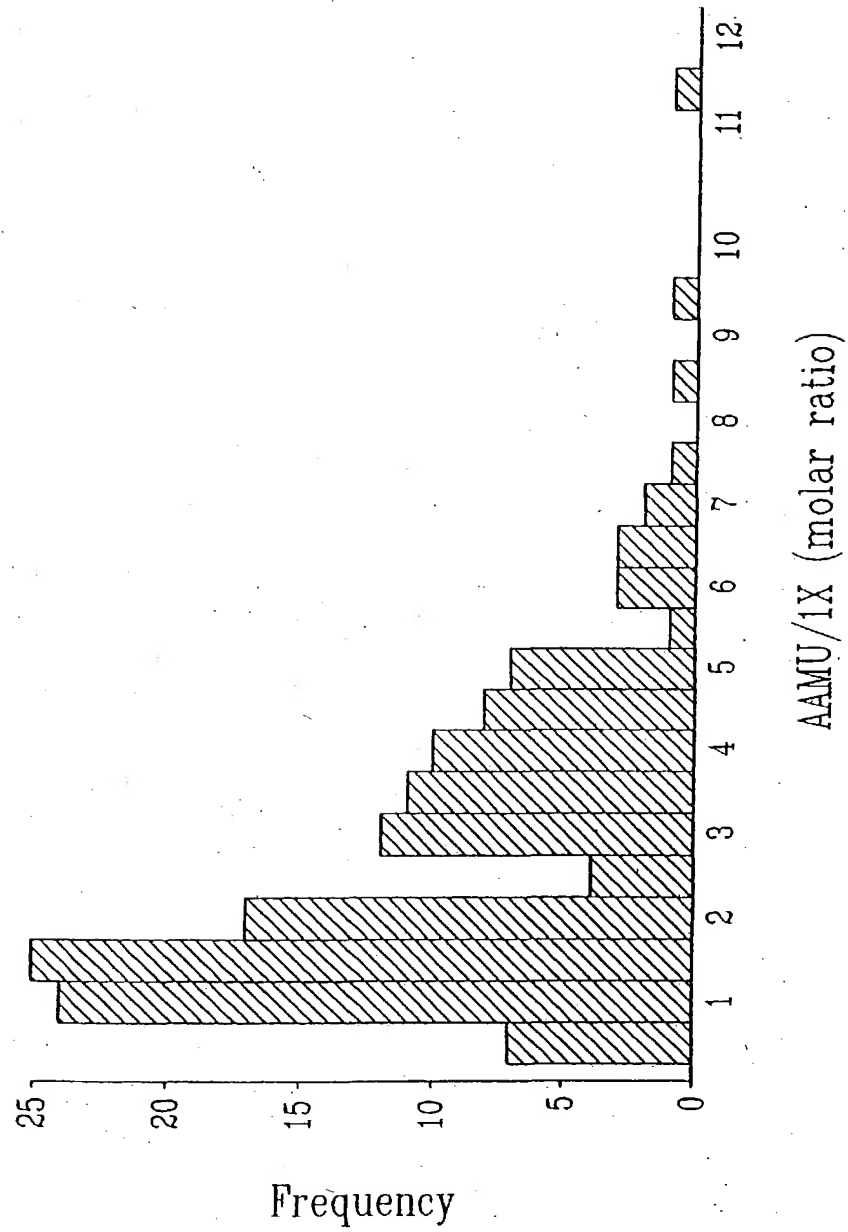
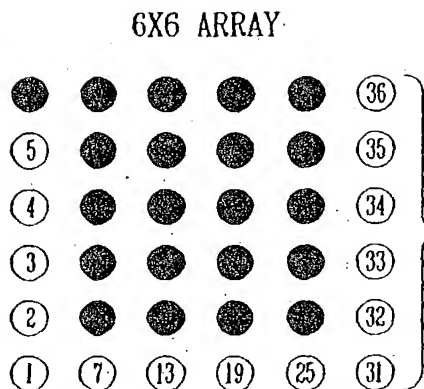


Fig. 20



ANTIGEN KEY:

1. BIOTINYLATED BSA MARKER
- 2-6. BUFFER BLANKS
7. NAT2: AAMU
8. BIOTINYLATED BSA MARKER
9. NAT2: 1X
10. NAT1: pASA
11. NAT1: ACETYL-pASA
12. CYP1A2: CAFFEINE
13. BIOTINYLATED BSA MARKER
14. CYP1A2: 1,7-DMX
15. CYP1A2: 1,7-DMU
16. CYP2A6: COMARIN
17. CYP2A6: 7-HYDROXYCOUMARIN
18. CYP2C19: R- (-) -MEPHENYTOIN
19. BIOTINYLATED BSA MARKER
20. CYP2C19: S- (+) -MEPHENYTOIN
21. CYP2C9: DICLOFENAC
22. CYP2C9: 4-HYDROXYDICLOFENAC
23. CYP2D6: DEXTROMETHORPHAN
24. CYP2D6: DEXTROPHAN
25. BIOTINYLATED BSA MARKER
26. CYP2E1: CHLORZOXAZONE
27. CYP2E1: 6-HYDROXYCHLORZOXAZONE
28. CYP3A4: MIDAZOLAM
29. CYP3A4: 1-HYDROXYMIDAZOLAM
30. BUFFER BLANK
- 31-36. BIOTINYLATED BSA MARKER

Fig. 21

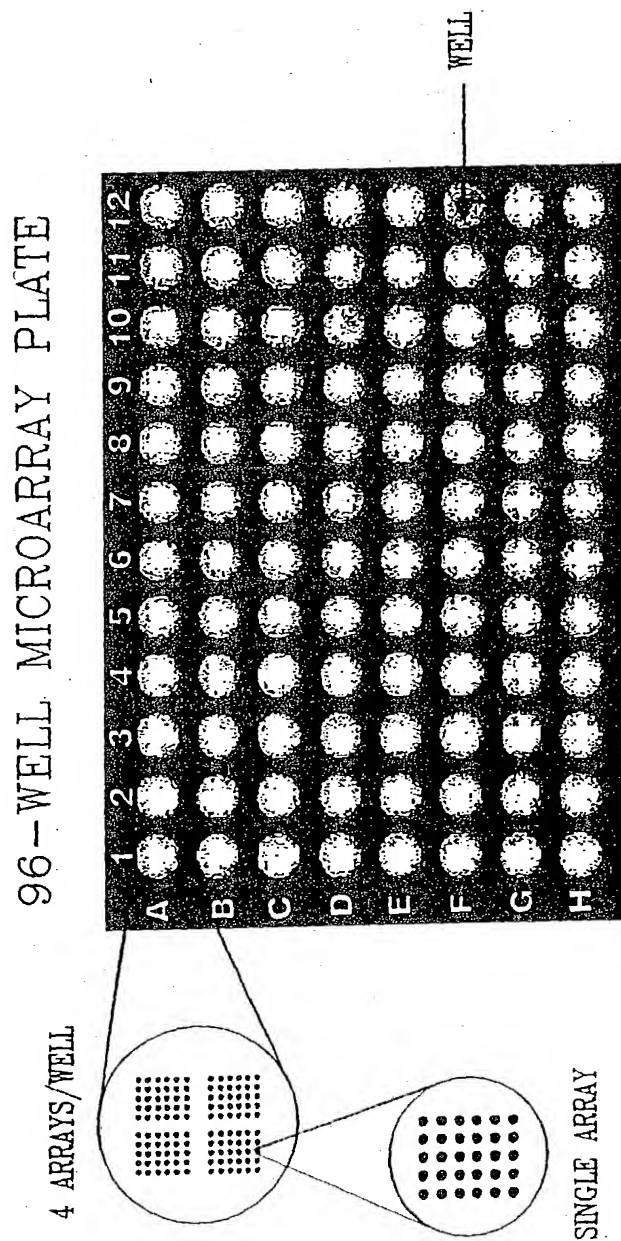


Fig. 22

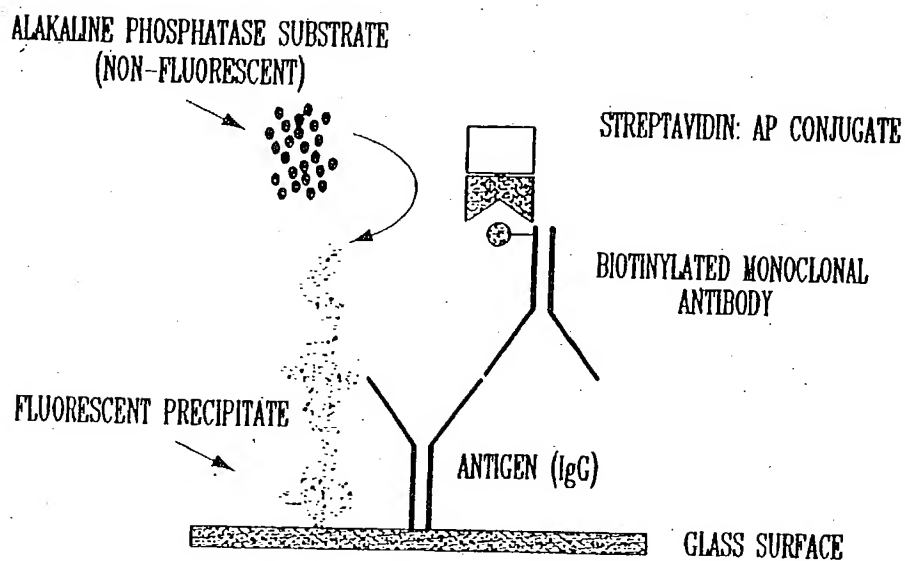


Fig. 23

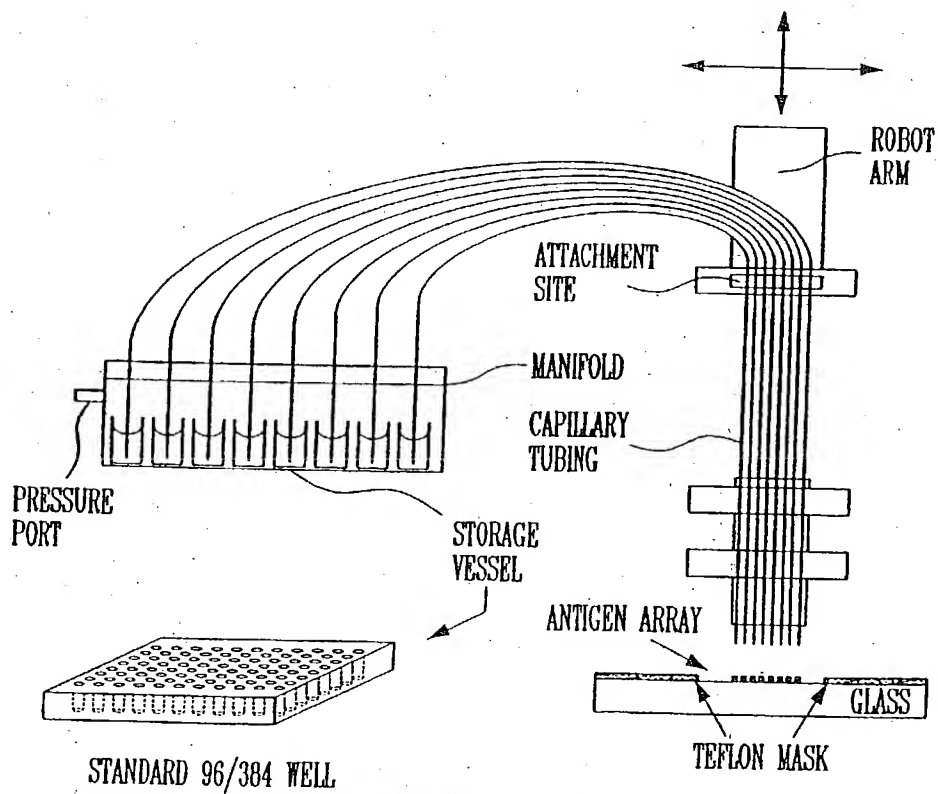


Fig. 24

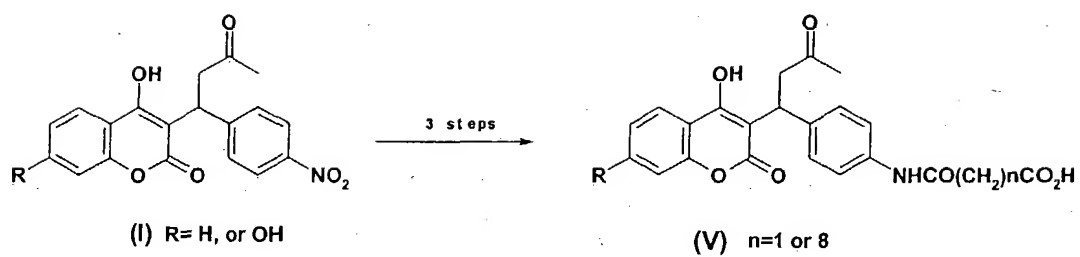


Fig. 25

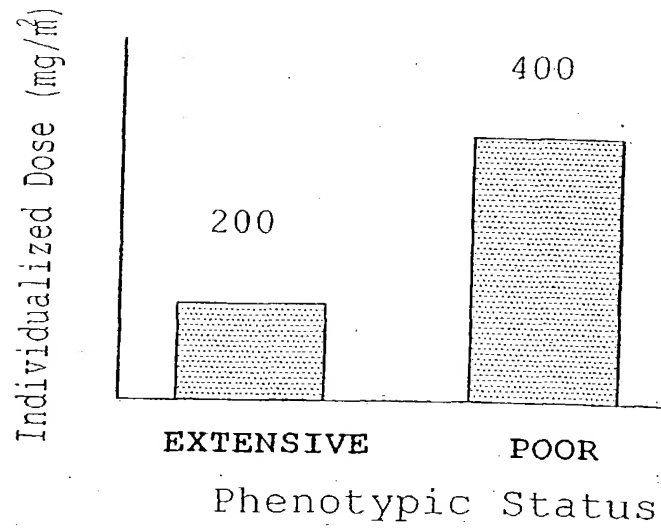
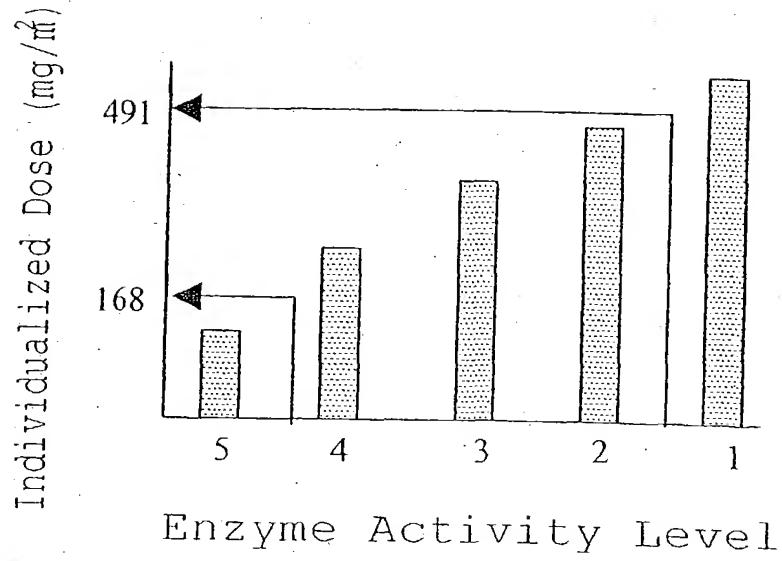


Fig. 26

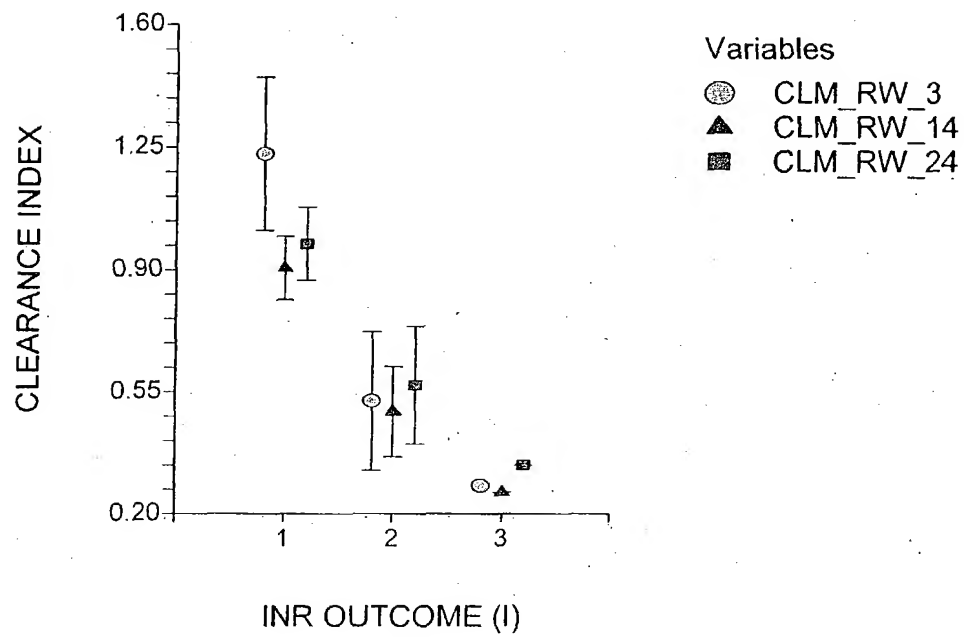


Fig. 27